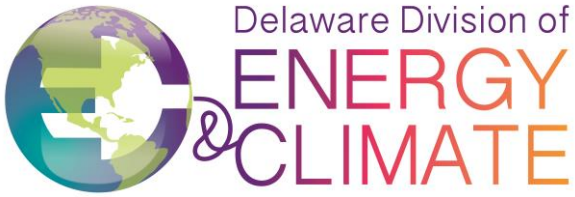
Delaware Energy Efficiency Industrial

Program Guidelines and Operational Procedures

November 2017



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1.0 Purpose

The purpose of these guidelines is to prescribe procedures relating to the Energy Efficiency Industrial (E2I) program. It is the goal in establishing these guidelines to provide a streamlined procedure for administering and distributing program funds.

These guidelines provide rules of practice and procedure for grant and loan applications and disbursement of grants for qualifying industrial energy efficiency projects in Delaware.

3.0 Energy Efficiency Industrial Appropriation

The Public Service Commission approved the allocation of $8,000,000 to be set aside as an endowment fund for use as directed by DNREC toward an industrial/large commercial grant or loan fund to Delmarva Power's large commercial and industrial customers as per PSC Docket No. 14-193. This program is named Delaware Energy Efficiency Industrial (E2I).

4.0 Delaware Energy Efficiency Industrial General Requirements

4.1 General Provisions

All grants are on a first-come first-served basis. In no event shall the Fund provide grant funding for more than 30 percent of the total costs of any proposed projects or support projects already receiving support from the Green Energy Fund under this chapter or the Strategic Fund. No projects may commence and no equipment may be ordered or purchased before receiving pre-approval from DNREC.

4.1.1 Program Limits

The Fund will not pay more than 30 percent of the total project cost shown on the invoice and projects will not exceed $500,000 without written approval of the Division Director.

4.1.2 State Energy Program Revolving Loan Fund

The State Energy Program Revolving Loan Fund (SEPRLF) can be used to supplement an E2I grant or as a stand-alone loan. The program offers low-interest loans for installation of energy efficiency measures that, in turn, lower their bills while reducing the environmental impacts of energy production, delivery and use. Applicants need an energy audit that includes a detailed project description as well as documented energy savings. Applicants can be from the commercial, industrial, nonprofit, schools, local government, agricultural and institutional sectors. Underwriting is done in house by DNREC thereby allowing for greater flexibility in loan terms and conditions. Loan approval will not compromise an applicant's E2I grant amount, meaning that loans can be used in

combination with a grant to help pay the balance of the project cost.

4.2 Eligibility

The E2I Program is available to Delmarva Power and Light Large Business Customer facilities whose annual energy consumption is greater than 10,000 MWh or 95,000 MMBtu annually.

4.3 Existing and Future Flood Risk Mitigation

Installations must be designed to avoid impacts from flooding, including future sea-level rise. Applicants are encouraged to utilize the Flood Risk Adaptation Map (FRAM) to determine whether the proposed site is within the one-hundred year, one-meter, sea-level rise flood plain. See site: www.firstmap.delaware.gov/FRAM

If applicants are within the one-hundred year, one-meter, sea-level rise flood plain, applicants must submit a flood risk mitigation plan as part of the design portion of the proposed system with their application.

4.4 Permits

All E2I projects must obtain all relevant permits from DNREC and all other necessary state, local, regional, and federal permits to be considered for an application.

4.5 Installing Contractor Guidelines

4.5.1 Education and Licensure

Installing contractors shall maintain appropriate education and licenses, industry certificates and accreditations to ensure the program preserves the end-users' expectation of professional work. The installing contractor must be licensed in the State of Delaware. A professional engineer must be part of the applicant's project team and must verify energy savings calculation documents included with the project application.

Where industry certification programs have been promulgated, grant recipients are encouraged to use industry certified contractors.

4.5.2 Insurance Requirements

The installing contractor and anyone acting under its direction or control or on its behalf shall at its own expense procure and maintain in full force at all times Commercial General Liability Insurance with a bodily injury and property damage combined single limit of liability of at least ONE MILLION DOLLARS ($1,000,000) for any occurrence.

4.5.3 Statement of Reliability and Good Standing

Contractor must be reliable and in good standing with a "Satisfactory Record" (or no negative reports) with the Better Business Bureau. The contractor shall provide a copy of their Better Business Bureau report to DNREC upon request. Reports may be obtained at

the following address.

BBB of Delaware
60 Reads Way
New Castle, DE 19720
Phone: (302) 221-5255
Fax: (302) 221-5265
Web Site: www.delaware.bbb.org
Email: info@delaware.bbb.org

4.5.4 Limitation of Funds

The Program funds are limited and should be treated as one-time monies. The installing contractor shall follow program guidelines to ensure reservation of funds prior to installing a qualifying system.

4.6 Warranty

All qualifying systems receiving an E2I grant must have a full 3-year warranty against component failure, malfunction and premature output degradation. The warranty must cover all components for which the program incentive is granted and cover the full cost of repair and replacement of all components of the system. For professionally installed systems, the warranty must cover the labor to remove and replace defective components and systems.

DNREC neither expressly nor implicitly warrants the performance of installed equipment. Participants should contact their contractor for details regarding the equipment warranties.

4.7 Code Compliance

All qualifying systems must be installed in accordance with the standards and specifications of the manufacturers of the components in the system, in compliance with all federal, state, and local safety, building and environmental codes and ordinances and these guidelines. Where discrepancies, if any, exist with these guidelines and local codes, local codes shall govern.

Qualifying systems must exceed Delaware's current building energy code minimum requirements in order to be considered for E2I grant funds. The program will only pay incentives on the energy savings resulting from projects that bring buildings or systems beyond code minimum, and incentives will be based on the difference between code minimum and the energy efficient case that exceeds code minimum. The program will not pay incentives on projects to bring buildings or systems up to code minimums. With regard to Delaware's current building energy code, qualifying systems must exceed minimum code requirements in order to be considered for energy efficiency grant funds. For more on Delaware's energy codes, please see de.gov/energycodes.

All equipment must be tested to Underwriters Laboratory ("UL") standards and be UL listed and installed per manufacturer's instructions.

5.0 Delaware Energy Efficiency Industrial Fund Procedures

Projects in the E2I program will be treated as custom projects geared for businesses with more unique or complex energy efficiency projects. Prescriptive lighting projects may also be completed, but will require that applicants complete a separate prescriptive lighting application.

5.1 Grant Applications

The E2I program is designed to encourage non-standard energy-efficiency measures, geared towards a comprehensive full-facility upgrade that maximizes energy savings and cost effectiveness. The program allows for more comprehensive, unique and creative solutions to projects that are more complex.

The customized incentives are based on calculated energy and demand savings, as well as cost effectiveness, and are limited by total project cost. This option allows for the greatest flexibility and creativity in design by providing an incentive on a facility wide scale. The projects qualifying under this program are generally more complex and aggressive measures that permanently raise the efficiency levels beyond that of standard equipment.

5.1.1 Grant Limits

Subject to the availability of funds, applicant must propose a project that results in annual energy savings. The grant will be paid at a rate of $0.14 per first year annual kilowatt-hour saved and $5 per first year annual MMBtu and $500-$700 per peak kilowatt saved, up to 30 percent of installed cost, whichever is less. Program funds are limited and must be reserved prior to beginning the project to ensure availability.

Typically, the savings generated by these custom measures are site and end use specific and require a detailed analysis to qualify for an incentive. Recognizing this, DNREC requires a detailed system design and a predicted performance calculation verified by a Professional Engineer (P.E.) on 100 percent of proposed projects.

All applications require documentation of the savings calculations and cost estimates. The calculations should clearly show all the details of how energy savings and costs were estimated. This includes all engineering formulas and documentation of all the factors, values, and assumptions used in the formulas. Attach additional sheets as required (spreadsheets preferred). All savings documentation must be verified, signed, and stamped by a licensed professional engineer (P.E.).

Acceptable forms of documentation include engineering calculations and energy modeling by a consultant or other third party. In cases where energy modeling is used to determine savings, approved modeling software must be used: consult with DNREC for approval of modeling software. Input and output data from the model

must be provided. Specification sheets for all existing and proposed systems must be provided. Supporting documentation of measured results should also be included for measured variables in the form of plotted data or other acceptable data logger output. Failure to submit acceptable documentation will result in a determination of ineligibility.

5.1.2 Accepted Products and Equipment

All projects that are considered energy efficiency measures may be eligible to receive an E2I grant, as long as they exceed minimum building energy code requirements. Additionally, an application must include a minimum of five different improvement categories. Projects that include more than five different improvement categories that are each at least five percent of the total project savings (expressed in MMBtu) will receive consideration for a higher $/kW incentive rate, up to the maximum of $700/kW. Multiple factors may be taken into account in determining the $/kW rate for the project. Examples of possible improvements over baseline include:

- Building envelope
- Steam / Boiler system improvements
- Process Heat recovery
- Combined Heat and Power (CHP)
- Compressed Air improvements
- Chiller plant improvements
- Variable Speed Drives
- Heating Ventilation and Air Conditioning improvements
- Plug Load Controls
- Service Water Heating improvements
- Lighting Power Density improvements beyond code (using a mix of daylighting, delamping, highly reflective interior surfaces, and fixture efficiency)
- Other Process Improvements, where applicable

5.1.2.1 Prescriptive Lighting Projects

The E2I program will also include a prescriptive lighting component; the applicant must fill out the prescriptive lighting application, follow the requirements of that application, and submit with their E2I application. Prescriptive lighting savings must be calculated independently and separated from the savings attributed to other eligible measures in an E2I grant application.

5.1.2.2 Ineligible Projects

The following are not eligible for an E2I grant:

- Routine maintenance procedures
- Renewable energy generation (e.g. wind, geothermal, solar, etc.)
- Projects with less than a 6 month simple payback
- Industrial technologies not approved by nationally recognized laboratories

- Power conditioning/ power factor equipment
- Equipment studies
- Projects with less than 1.0 benefit cost ratio (using the Total Resource Cost, TRC, method)
- Projects that bring the building up to minimum code requirements
- Other restrictions as deemed appropriate by DNREC

5.1.3 Measurement and Verification

E2I project applications must include draft measurement and verification (M&V) plans for all measures that are to be part of the project. M&V plans should meet International Performance Measurement and Verification Protocol (IPMVP) guidelines based on the types of projects being proposed, and, where assumptions are made, those assumptions must be consistent with the current version of the Mid-Atlantic Technical Reference Manual. Depending on the complexity of the project, any weather dependency, and nature of the variables in the algorithms used to determine energy savings, IPMVP guidelines may dictate more extended data logging or power metering may be necessary, possibly both pre- and post-installation of measures. DNREC will review draft applicant M&V plans as part of the application pre-approval process to ensure that IPMVP guidelines are met. If a draft M&V plan is determined to be deficient, the draft plan will be returned to the applicant and will need to be modified and resubmitted to DNREC for final approval. The final M&V plan must be included in the application package.

5.1.4 Application Process

Prior to purchasing any equipment or beginning a project, applications for the E2I program must receive pre-approval from DNREC. A statement of reservation of funds and authorization to proceed will be issued by DNREC upon acceptance as a project. DNREC will pre-inspect all facilities included in the application, and in some cases (especially complex or large scale projects) DNREC may require measurement of baseline system conditions or power input. In the case of complex or large scale projects, it is also likely that post-installation metering would be required. In cases in which pre- and post-installation metering is necessary based on project scope, but is not indicated in the applicant's M&V plan, DNREC will convey the requirement for metering to the applicant in the form of edits and/or comments to the draft M&V plan.

After receipt of the completed application and any required supplementary documentation, DNREC will evaluate the project for consideration of grant pre-approval. The contractor and customer are fully responsible for ensuring that all forms and documentation have been supplied and the system meets all program requirements. DNREC will review the grant application package and all supporting documentation. If the requirements have been successfully met, a pre-approval letter will be issued by DNREC to the applicant.

Funds will be reserved for 18 months on a first-come, first-served basis. The final grant claim form and supporting documents shall be submitted within the 18

months of the reservation date or funds will be forfeited. If the claim form is not received at the end of the 18-month reservation period, a milestone accomplishments report will be submitted to DNREC or the reservation will be forfeited. DNREC will determine if a reservation extension should be granted.

After completing the project, the applicant must submit the final documents pertaining to the project. DNREC will evaluate the final project documents for consideration of grant approval. DNREC will conduct an inspection of the buildings and systems included in the project prior to final grant approval.

DNREC will ordinarily process the payment to the applicant, however, if the applicant so requests in writing and documentation reflects the grant value was reduced directly from the purchase price, DNREC will process the payment to the retailer or installing contractor

5.1.5 Application Requirements

Applications must be completely and accurately submitted before incentives can be paid. Required documentation includes:

- Project description and detailed scope of work, AND
- Specification (cut) sheets for all equipment, AND
- Technical data and testing laboratory information, AND
- Itemized quotes and estimates for all equipment listed in the project scope of work, AND
- Twelve consecutive electric and/or natural gas utility bills, AND
- Commercial General Liability Insurance certificate, Delaware business license, and Delaware trade-specific license for each installer who will be involved in the project, AND
- Documentation of the energy savings calculations and cost estimates for measures from at least five improvement categories, verified, signed, and stamped by a licensed professional engineer (P.E.). AND
- Measurement and Verification (M&V) Plan for the project measures, AND
- Project schedule including detailed milestones, AND
- Delaware State Substitute W-9 form submitted electronically to https://w9.accounting.delaware.gov/, AND
- If a prescriptive lighting component, a lighting schedule and a ceiling plan, separate prescriptive lighting application, lighting specification (cut) sheets, and energy savings calculations, AND
- Recycling/disposal of retired equipment plan, AND
- After project completion, itemized invoices for all installed equipment.

Additional information may be requested upon review of initial proposal as deemed appropriate by DNREC.

5.1.6 Application Review

Application Received:
Contractor or applicant submits the project application to DNREC. The application and date received is logged into the tracking spreadsheet and a review is scheduled.

Application review:
DNREC reviews the application and energy calculations for completeness. If there is any missing information, or if anything is needed in order to accurately estimate the energy savings from the project, DNREC will follow up with the applicant. DNREC reserves the right to deny applications that are unreasonably incomplete or that fail to become complete after due diligence to collect the required information. The program manager may also decide the application needs additional study or metering data to be confident in the estimates, and may notify the applicant to request additional information or a site visit.

Pre-Installation Site Visit:
DNREC will conduct a pre-installation site visit on 100 percent of projects, in order to ensure that the installation has not yet begun and that baseline conditions were accurately described in the application. During the site visit, DNREC may also collect information to enable it to accurately calculate savings. If the application provided adequate information, the site visit may be deferred until after the pre-screening. This will ensure that DNREC does not spend time visiting a project that does not pass the Total Resource Cost (TRC) test.

Project Pre-screening and Incentive calculation:
All projects will be pre-screened based on the actual cost of the project and the savings provided by the applicant and verified by the program manager. If the project does not pass the initial screen, the program manager will notify the applicant. The applicant may choose to modify the project or lower the cost in an attempt to move the project along. Once the modified project information is received by DNREC, pre-screening will be performed again using this updated information.

The incentive award calculation will be based on the pre-screen results.

Grant Pre-Approval Letter:
If the project passes the pre-screen, the applicant will be sent a pre-approval letter that reserves the grant amount for not more than 18 months . The letter will also include a disclaimer that the grant award cannot be guaranteed if there are changes in scope or cost.

The applicant is responsible for submitting the final documents once the project is installed and completed.

Post-Installation Site Visit

A post-installation site visit may be necessary due to minor changes in scope as a project proceeds from design to completion and to ensure that the final savings estimates reflect the project as installed, rather than the project as designed. These site visits will be performed on a sample of project sites. In some cases (depending on the complexity and scale of the project), DNREC may require that extended post-installation metering or data logging be completed or that information from Energy Management Systems be gathered in order to verify that installed measures are performing as was predicted by engineering calculations or modeling.

Final Screening
If the scope of the project changed enough to significantly lower savings and/or make the project fail the TRC, DNREC may elect to adjust the incentive amounts.

Grant Payment
Once the project passes the final screening, the grant is ready to be disbursed to the applicant. DNREC will send a letter notifying the applicant of payment approval and will record the payment information in the Payment Summary sheet.

Equipment must be new, and must be purchased and installed before the grant payment can be issued. Both payment and commitment of grant are subject to availability of program funds.

6.0 Proprietary Application Information

DNREC may make all applications submitted available to non-State personnel for the sole purpose of assisting in its evaluation of the applications. These individuals will be required to protect the confidentiality of any specifically identified proprietary information obtained as a result of their participation in the evaluation.

Proposals submitted may contain trade secrets and/or privileged or confidential commercial or financial information which the applicant does not want to be used or disclosed for any purpose other than evaluation of the application. The use and disclosure of such data may be restricted, provided the applicant follows DNREC's "Request for Confidentiality" procedure contained in DNREC's "Freedom of Information Act" or "FOIA" regulation. It is important to understand that this FOIA regulation's confidentiality procedure is a necessary part of this regulation in that any information submitted to DNREC is subject to public review unless deemed to be confidential by the Secretary in accordance with the criteria and procedures established in the FOIA regulation.

The burden lies with the applicant asserting the claim of confidentiality to meet the criteria established in the FOIA regulation.

7.0 Retirement and Disposal

The intent of the E2I program is to increase energy efficiency through retirement and replacement of inefficient equipment. The customer and contractor shall appropriately retire and dispose of any product replaced as a result of an E2I program grant.

The customer is responsible for the proper disposal or recycling of any waste generated as a result of the project, including the disposal of fluorescent lamps (which contain mercury) and ballasts suspected of containing PCBs. Any fluorescent ballast dated pre-1979 should be considered to contain PCBs unless otherwise labeled.

8.0 Dispute Resolution

Should an applicant be denied a grant and disagrees with outcome, the applicant must contact DNREC in writing by mail to:

Emily St. Clair
100 W. Water Street
Suite 5A
Dover, DE 19904.
DNREC will respond within 10 days after the determination. Should DNREC deem the application eligible, the application will be processed within the next 10 business days.

9.0 Tax Liability

The applicant is responsible for any tax liability imposed as a result of the payment of grants. Applicants are advised to contact a tax professional for more information.